County of San Diego



A Systems Approach to Addressing Wildfires and Fire Protection

What San Diego County has done to Protect People and Property from Wildfires.



BACKGROUND:

In October 2007, wildfires raged across San Diego County just as they did four years earlier in 2003, destroying thousands of homes and forcing hundreds

of thousands of people to flee. But when the fires died, crews found signs of hope inside the charred perimeter — evidence that County action to improve building codes and policies had better protected people and property. The evidence lay in the wreckage, or rather, in the lack of it.

The 2007 fires destroyed 13 percent of all the structures trapped inside their boundaries. But they only destroyed 2 percent of those structures that had been built to the codes that County officials improved after the 2003 wildfires. Those code improvements, many adopted in 2004, focused on six areas as reflected in the graph below.



This report summarizes some of the more significant changes the County has implemented following these wildfires.

FIRE SUPPRESSION

 Year-Round Fire Protection. Starting in 2004, San Diego County and CAL FIRE signed contracts to provide year-round, 24-7 coverage in remote areas of the rural backcountry.

- Reorganization. In June 2008, the BOS approved a plan to consolidate fire and life safety services in 1.56M acres of the unincorporated rural backcountry.
- New Fire Suppression Equipment. To date, 30 pieces of suppression equipment were purchased including 13 Water Tenders and 13 Type II Engines and provided to the various volunteer fire companies and CAL FIRE.
- <u>Super Scoopers</u>. In May 2008, the BOS leased two CL-415 Superscoopers and one air tactical aircraft, which communicates with the incident commander on the ground to decide where, when and how fires should be attacked from above. The planes provide support to any jurisdiction within the County of San Diego.
- <u>Night Flying Capabilities.</u> Starting in September 2008, actions were implemented to allow for night aerial fire detection and suppression activities.

DAMAGE ASSESSMENT

• <u>Damage Assessment.</u> Working on behalf of CAL FIRE, the County's Building Division has been in charge of assessing all damage caused by major wildfires since 1996. Several agencies rely upon our damage assessments to help their own work. They include the Red Cross (to distribute food and clothing); FEMA (to provide shelter for victims); insurance companies (to expedite claims); the Building Department (rebuild); and the Assessor's Office (to adjust tax rolls). Planning agencies also use the damage reports to figure out how to improve building codes so that future fires will cause less damage.

FIRE AND BUILDING CODES

Building Code Updates.
In 2004 County leaders improved the local building codes by adding new requirements to use more ignition-resistant materials. That meant not



just using Class A roofing, but non-combustible material such as stucco for exterior walls, and dual-paned windows. It also meant building attic and foundation vents in locations that would deter burning embers from entering structures. And, for

GOVERNMENT MUST CONTINUE TO FIND WAYS TO IMPROVE CODES AND POLICIES TO MAKE CITIZENS AND STRUCTURES SAFER WHEN FIRES HIT.

those structures built in the most fire-prone areas, the requirements were ratcheted up even further. Skylights had to be made of tempered glass; rain gutters must be metal instead of plastic; outside doors must be solid-core or noncombustible; eaves had to be made from ignition-resistant materials or heavy timber, and untreated small dimension wood patios, decks, and fences could not be attached to houses.

VEGETATION MANAGEMENT

 3D Program. The County and local agencies spent nearly \$47 million to remove about 530,000 dead, dying and diseased trees



in the Palomar Mountain and greater Julian areas. The focus was along evacuation roads and exit corridors (roughly 244 total road miles). The County is actively seeking an additional \$45 million to complete work in Palomar and Greater Julian areas over the next four years

- Combustible Vegetation Ordinance. Before 2004, the County's codes required builders and homeowners to keep "weeds" in check in the immediate 30 feet to 100 feet around structures. The County improved those codes in two ways. First, we dropped the "30 feet" and simply made the 100-foot requirement the standard. Then we clarified the vague "weeds" terminology, explaining that vegetation management included not just weeds, but combustible vegetation such as shrubs, green waste, dead and dying trees.
- <u>Codes Partnership.</u> The Department of Planning and Land Use (DPLU), working with local fire districts, CAL FIRE, and U.S. Forest Service, developed a combustible vegetation inspection program for the unincorporated area of the county. About 15,000 inspections are conducted annually, with 90% of the residents complying with the first notification.
- <u>FAST</u>. The Forest Area Safety Task Force (FAST), an organization made up of federal, State and local agencies has identified nine target areas of dangerous fuel loads and is currently developing specific projects to be considered in those areas.

LAND USE PLANNING

<u>Guidelines for Determining Significance.</u> Until 2007, builders in San Diego County faced a confusing collection of fire codes from the state and local fire agencies. To fix that, the County created a wildfire and fire protection section for its "Guidelines to Determine Significance" ---- a document that tells builders how to assess the environmental impacts of their projects. The section spells out what the County

- expects from developers to make their projects as fire-safe as possible. Failing to comply could create a "significant" environmental impact that could jeopardize the project's approval.
- <u>Fire Protection Plans.</u> All discretionary projects must submit Fire Protection Plans for their specific sites. The plans answer questions: How close are emergency responders? How quickly could they arrive? What water supplies are available? And they address code requirements about: fire sprinklers, ignition-resistant construction; defensible-space; and long-term vegetation management.

EDUCATION AND OUTREACH

- Wildfire Public Awareness Campaign A Wildfire Awareness Guide was mailed to County residents providing information on creating defensible space, landscaping to reduce fire risk, a fire resistant plant guide and steps to safeguard homes.
- AlertSanDiego Registration A campaign is under way to register cell phones, Voice Over Internet Protocol and email to receive emergency notifications. Home telephone numbers are currently in the system, but cell phones are not. To register, log onto www.ReadySanDiego.org and click on the AlertSanDiego icon.

OCTOBER 2007 CHANGES WORKING

The fact that the 2007 fires destroyed just 2 percent of the structures built to the improved codes and policies – opposed to the nearly 11 percent of the other structures – are evidence that the changes made a positive difference.



Palomar Mt. following the 10/2007 Wildfires

But we also know that we cannot rest. The County will continue to look at minimizing the risks from fires by finding new ways to improve the codes and policies that can make structures safer when fires hit.

Question can be directed to the County website at http://www.sdcounty.ca.gov/dplu/index.html.









